

REMARKS

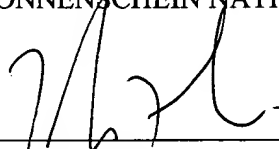
Reconsideration of this application, as amended, is respectfully requested. Claims 5, 23, 24 and 36, the presently pending independent claims of this application, have been amended to clarify that defects in microfabricated structures are detected, in part, by finding repetitive regions of the microfabricated structures by creating at least one X-direction one-dimensional profile of a cell-metric of contrast data of such structures and at least one Y-direction one-dimensional profile of the cell-metric of the contrast data and thresholding the at least one X-direction one-dimensional profile and the at least one Y-direction one-dimensional profile to derive contrast data of the repetitive regions. Such features are neither taught nor suggested by Maeda et al. US 6,674,890, hence the present claims are patentable over this reference.

Maeda describes a method for inspecting patterned features of a semiconductor wafer, wherein a pixel-wise matching unit and other components are employed to compare successive images of a portion of the wafer to detect defects therein. By adjusting gray levels of at least one of the successive images to be substantially the same as gray levels of the other of the successive images, greater sensitivities than were available using conventional systems are obtained. Missing from this system, however, is a mechanism for actually finding the repetitive features as recited in the present claims. Instead, it appears that the information concerning such features is provided from design information concerning the semiconductor device and not from any inspection of the image data. See, e.g., Maeda at col. 10, ll. 4 - 12.

For at least these reasons then the present claims are patentable over Maeda. All of the above amendments are supported by the specification as originally filed, for example at paragraphs 62-68. Authorization is hereby given to charge our Deposit Account No. 19-3140 for any additional fees that may be due in connection with this communication.

Respectfully submitted,

SONNENSHEIN NATH & ROSENTHAL LLP



Tarek N. Fahmi
Reg. No. 41,402

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P.O. Bo 061080
Wacker Drive Station
Sears Tower
Chicago, IL 60606-1080
(415) 882-5023